

Amendments to the Claims:

This listing of claims will replace all prior versions and listing, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A dynamic optimizing method for speed data used for preparing a speed instruction pattern fed to a servo motor in a positioning device, comprising:

calculating a desired speed pattern when a moving distance, speed, acceleration time and deceleration time are inputted; and

specifying a speed pattern preparation cycle by a user ~~without changing~~ and shifting a decimal part of the speed data right or left to prevent a maximum value of the speed data and a minimum resolution of the speed data from being changed.

Claim 2 (Previously Presented): The dynamic optimizing method for speed data according to Claim 1, further comprising selecting a combination of the maximum value and the minimum resolution of the speed data by the user.

Claim 3 (Canceled).

Claim 4 (Currently Amended): A positioning device using a servo motor, comprising:

- a moving instruction input unit inputting a moving instruction;
- a speed pattern preparation cycle unit inputting a speed pattern preparation cycle specified by a user ~~without changing~~ and shifting a decimal part of the speed data right or left to prevent a maximum value of speed data and a minimum resolution of the speed data from being changed;
- a speed pattern preparation unit preparing a speed instruction pattern based on the moving instruction, the speed data, and the speed pattern preparation cycle;
- a speed instruction unit outputting a speed instruction per cycle based on the speed instruction pattern from the speed pattern preparation unit; and
- a servo control unit driving the servo motor based on the speed instruction from the speed instruction unit.